

## AMENDMENTS TO THE CLAIMS

### Please amend the claims as follows:

1-23. (Canceled)

24. (Currently Amended) A system for setting parameters for contrast agent medical imaging, the system comprising:

a user input control;

a memory operable to store a table of a plurality of transmit sequences and a plurality of transmit levels, at least two transmit levels associated with at least one of the transmit sequences; and

a processor operable to select different ones of the plurality of transmit sequences and of the plurality of transmit levels in response to a single input from the user input control, the single input for adjusting a transmit level for contrast agent response during imaging, the processor operable to select, during the imaging, the different ones of the plurality of transmit sequences and of the plurality of transmit levels based on alteration of the transmit level received from the user input control, the selection corresponding to altering the transmit level without altering the transmit sequence for one of the adjusting of the transmit level and corresponding to altering the transmit level and transmit sequence for another of the adjusting of the transmit level, each transmit level being distinct and associated with one of the transmit sequences, and at least some of the transmit levels associated with a same one of the transmit sequences and at least some of the transmit levels associated with different ones of the transmit sequences.

25. (Original) The system of Claim 24 wherein the user input control comprises a one of a rotatable knob, a touch screen control, and a button.

26. (Original) The system of Claim 25 wherein the processor is operable to select from a range of transmit levels and at least two different transmit sequences in response to actuation of the user input control, a first of the at least two transmit sequences associated with lower

transmit levels and a second of the at least two transmit sequences associated with higher transmit levels.

27. (Original) The system of Claim 24 wherein the table includes settings for each of the transmit levels of transmit modulation frequency, transmit bandwidth, transmit coding, number of transmit foci per scan line, number of transmit pulses per scan line, number of transmitted lines per image, time between transmissions, velocity scale, reverberation-suppression pulses, receive bandwidth, receive demodulation frequency and combinations thereof.

28. (Previously Presented) The system of Claim 24 wherein the processor is operable to obtain a measure of the contrast agent response and automatically select at least one of the different one of (i) the plurality of transmit sequences and (ii) of the plurality of transmit levels in response to the measure.

29. (Original) The system of Claim 24 wherein each transmit sequence includes a number of pulses, a phase of pulses and an amplitude of pulses for each scan line.

30. (Original) The system of Claim 24 wherein a first of the plurality of transmit sequences has multiple transmit pulses with interpulse amplitude modulation for each of a plurality of scan lines and a second of the plurality of transmit sequences has multiple transmit pulses having a same amplitude and phase for each of the plurality of scan lines.

31. (Currently Amended) A system for setting parameters for contrast agent medical imaging, the system comprising:

\_\_\_\_\_ a user input control;

\_\_\_\_\_ a memory operable to store a table of a plurality of transmit sequences and a plurality of transmit levels, at least two transmit levels associated with at least one of the transmit sequences; and

a processor operable to select different ones of the plurality of transmit sequences and of the plurality of transmit levels in response to a single input from the user input control, the single input for adjusting a transmit level for contrast agent response;

The system of Claim 24 wherein the at least two transmit levels comprises at least three transmit levels, the at least three transmit levels being a low, a medium and a high transmit level, and wherein the processor is operable to select settings of:

for the low transmit level, the transmit sequence having multiple pulses with at least one of different amplitudes and phases, the transmit modulation being low and the receive demodulation frequency being medium;

for the medium transmit level, the transmit sequence having multiple pulses with at least one of different amplitudes and phases, the transmit modulation being medium and the receive demodulation frequency being high; and

for the high transmit level, the transmit sequence having multiple pulses with all pulses having one of a same amplitude and a same phase, the transmit modulation being high and the receive demodulation frequency being low.

32. (Previously Presented) The system of Claim 24 wherein the processor is operable to select:

multiple transmit pulses with interpulse amplitude and phase modulation;  
multiple transmit pulses having a same amplitude and phase;  
multiple transmit pulses with interpulse amplitude modulation; or  
multiple transmit pulses with interpulse phase modulation.

33. (Previously Presented) The system of Claim 24 wherein the processor is operable to set the transmit level as one of at least a low and a high transmit level, allow acquisition of velocity information in addition to contrast agent detection for the low transmit level, allow velocity scale adjustment for the low transmit level, and preventing acquisition of velocity information in addition to contrast agent detection for the high transmit level.